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(54) Title: NOVEL DEVICE, SYSTEM AND METHOD FOR FLUORESCENCE DETECTION

(57) Abstract: A device, system and method for portable fluorescence detection. The portable device of the present invention features a low power light, in which a wavelength range is defined as at least one wavelength of light. The light source is preferably highly energy efficient, such that a majority of the electrical power which is consumed is then converted into transmitted light. The emitted light from the excited fluorophore is then preferably detected with any low cost and low power photodetector. Although optionally a highly sensitive optical detector may be used, preferably fluorescence is detected with any light sensing device, such as a regular photodiode or a CCD (charge-coupled device) sensor for example.